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Roadmaps as DoDAF Architecture Products & Uniform Data Elements



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Introduction



Areas of focus

- Relationship of DoDAF architecture products (SV4, SV5, SV8, SV9, TV2) to capability type roadmaps
- Candidate Uniform capability roadmap data elements
- Potential Navy Roadmap Role of the DoDAF SV8, SV9, TV2
- Align capability roadmaps (FORCEnet Enterprise approach) via a uniform format & agreed data content approach



Relationship of DoDAF Architecture products to a Capability-based Roadmap

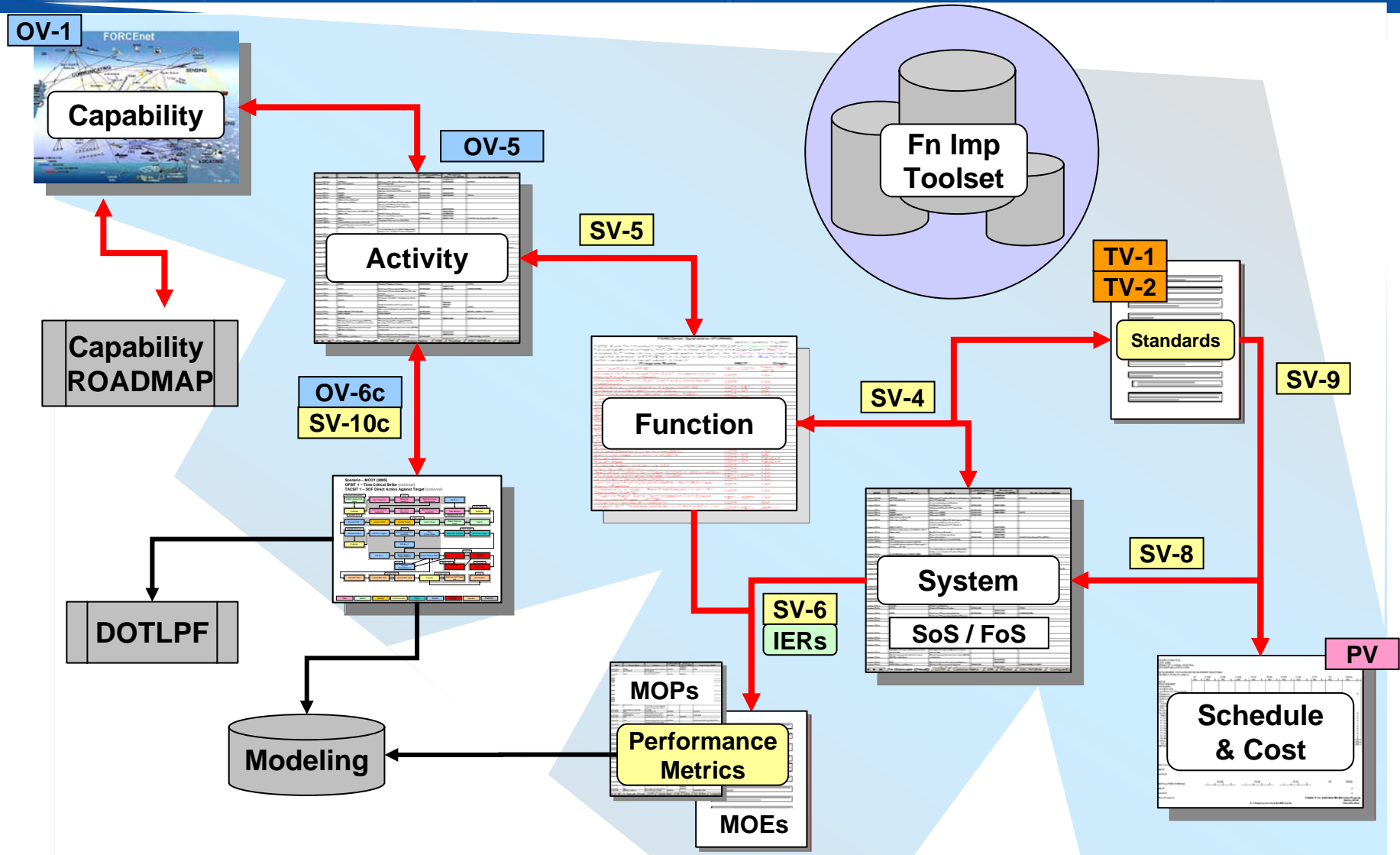


- FORCEnet capabilities can be defined by appropriate DODAF architecture products to provide a mapping from capabilities to activities (OV5) to functions (SV5) and to systems (SV4)
- This requires a **uniform format**
- The DoDAF SV8 (system evolution description) should serve as guidance for building a capabilities roadmap that maps DoDAF architecture products to capabilities



FORCEnet Data Relationships

FORCEnet
engineering
conference





Candidate Uniform Data Elements supporting Capability Roadmaps



Required FORCEnet Capabilities (Functional Concept) (1-15): numeric 1 digit

FORCEnet NCW Levels 1-3 (FY07, FY10, FY14)) FY Schedule Profile: text –
show by FY when capability “to be” delivered and coalesce at NCW level 1-3

FORCEnet Technology Code: one or two numeric codes FORCEnet codes: 1= Shipboard Combat Systems 2 = WAN, 3=MAN, 4= SATCOM protected, 5=SATCOM Unprotected, 6=Wireless Trunked LOS & BLOS, 7 = Wireless Networked LOS & BLOS TADILS, 8= SATCOM Land Entry points, 9=Comms Support, 10 = Radios, 11=Comms Tactical Switches, 12 =Comms Services, 13 = Wide Area Services (Voice Video Data), 14=Local Network , 15 =Coalition Network, 16 = Network Services, 17 =Distributed Services (COI) , 18 = GIG ES (COI), 19= Warfighting C2 (JBMC2), 20 =Operations Planning (Targeting, Navigation, ATO), 21= Joint, 22= Simulation, 23=Medical, 24 = Sensors, 25=ISR, 26=Information OPS, 27=Environmental (METOC), 28=Topographic, 29 =Collaboration, 30 =Office Automation, 31=Streaming Media, 32=Web & News, 33= ERP, 34=Messaging, 35 = HLS, ALL-E2E=36, other =37

NOTE: FORCEnet Technology codes could be broken out in a hierarchy fashion so only one code may be entered if desired



Candidate Uniform Data Elements supporting Capability Roadmaps



Net-Ready Key Performance Parameter (KPP) : Y/N

Real Time or NRT requirements (e.g. Missile Defense System): Y/N

IF YES, proprietary rights: Y/N



Candidate Uniform Data Elements supporting Capability Roadmaps



SYSTEM in FITS/FIBL?: Y/N

Planned FORCEnet Compliance dates: MM/DD/YY to MM/DD/YY

Is there a FORCEnet Compliance Plan?: Y/N

FORCEnet Consolidated Compliance Checklist (FCCC) % Completed:

System increases Bandwidth?: Y/N

System provides Bandwidth Management Guidance that improves bandwidth efficiency?: Y/N?

System provides data compression improvements?: Y/N

HSI consideration – Windows-based?: Y/N



Selectively include Programmatic Data Elements that are Capability-related



ACQ milestones: text **Near Term Fielding (FY05-FY09):** Y/N

Current ACQ MS/Phase (IOT&E, T&E, IOC, LRIP, FRP etc.): text code

PEO C4I Roadmap (capability) milestone : Y/N

Fielding plan: Y/N

Start date:

End date:

Note: Roadmaps don't normally contain fielding data so an interface to SPIDER, SHIPMAIN is needed

Shipboard Networks & Type (e.g. ISNS (Combat/OPS), NCTSS (Admin)) :

NESI Compliance Y/N:



Programmatic Data Elements that are Capability-related cont.



Is this an S&T Program: Y/N

Is the program based on an open-system design?: Y/N

Is there a Spiral development plan?: Y/N

Is this a KSA (Knowledge Superiority Assurance) FNC (Future Naval Capabilities) project?: Y/N

If YES, KSA Enabling Capability (EC level 1-8): text

Is there a Transition plan (for risk reduction)?: Y/N

Is there a Technology Transition Agreement Navy/USMC?: Y/N



Program Data Element Template Metrics



S&T evaluation metrics (e.g. operational utility assessment plan?) : Y/N

IF YES, POC name /Phone: text

KPP Performance Failure?: Y/N

IF YES, describe KPP threshold value metric that failed: text

IF YES, will program be reevaluated, reassessed or terminated?: text



System Gap Analysis & Functional Dependency Data Template



Gap Dependency Analysis?: Y/N **if yes POC: name/number text**

Manual or Automated Gap Dependency Analysis?: text

If automated, which system performs the Gap Dependency Analysis: text

Is there an SV4 (DoDAF) (CSFL mapping to systems) diagram?: Y/N **if yes POC: text** **(NOTE: Identifies functional dependencies)**

Is there an SV5 (DoDAF) (Functions mapped to NMETL/JMETL & other activity products) diagram?: Y/N

if yes POC: text **(NOTE: SV5 combined with SV4- Identifies gaps)**

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System Gap Analysis & Functional Dependency Data Template cont.



Is the program part of an aggregate of systems providing a capability when these systems are combined all together?: Y/N

IF YES, list the aggregates one by one: text

Are there any financial dependencies with other systems?: Y/N

IF YES, list the systems that are financially dependent & the ordering of the dependency: text

Physical space (physical footprint) dependency?: Y/N

If YES, list the other system or systems with a space dependency: text

Is there an ICD (Interface Control Document)?: Y/N POC: name/phone

List all systems sending data to this system & identify physical interface type for each: text

List all systems receiving data from this system & identify physical interface type for each: text

NOTE: Info from ICD's may be classified.



Way Ahead - Goals



- Be mindful of ASN/RDA Cheng “Enter once, use many” philosophy
- Determine our scope (e.g. templates supporting each organization & how to link these)
- Working session today (NOV 17th) to determine ways to align roadmaps and to review some candidate uniform data elements – collect recommendations from PEO IT, IWS, C4I and ONR
- Recommend a common format and repository for uniform roadmap data - Simpler the better - Keep effort UNCLASS
- Discuss ways to synchronize roadmaps with the proper DoDAF products SV4, SV5, SV8, SV9, and TV2 as a potential guidance vehicle for achieving (comparison/contrast) FORCEnet enterprise views